

The *Corema Conradii* station on Shawangunk Mountain

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The references, in Gray's Manual of Botany, Britton & Brown's Flora of North America, and Norman Taylor's Catalogue of Plants in the Vicinity of New York, and in the catalogue by the State Botanist, Dr. House, to the occurrence of Conrad's Crowberry, *Corema Conradii*, in the Shawangunk Mountains, in Ulster County, New York, long interested the writer before he had an opportunity to find this old station for the plant. The distribution of *Corema*, as botanical collectors know, is quite remarkable. The southernmost stand in the Pine Barrens of New Jersey, principally on the West Plains, ten miles east of Barnegat, and a few smaller stands in that vicinity, have often been visited in recent years, by the members of the Torrey Botanical Club. Its original discovery, more than a century ago, its temporary loss through failure to find it again, and its rediscovery about 50 years ago, are interestingly told in Dr. Witmer Stone's Plants of Southern New Jersey.

The plant was reported half a century ago, though its identity is doubtful, on Long Island, somewhere between Oyster Bay and Hempstead, but it certainly does not exist anywhere on Long Island now. It occurs on Cape Cod and is frequent on the Maine Coast and becomes commoner northward. The station reported in the Shawangunks interested the writer as the only one, apparently, between the Pine Barrens and eastern Massachusetts.

An expedition was organized, in April, 1932, to rediscover the Shawangunk station. As the references simply stated, "in the Shawangunk Mountains," which are twenty miles long and two to six miles wide, information which might limit the area to be searched was sought of Prof. M. L. Fernald, Curator of the Gray Herbarium, Harvard University, since the reference in Gray's Manual, Seventh Edition, seems to be the one which is adopted by other manuals and catalogues of our flora. Prof. Fernald kindly sent us the data on the tickets of two herbarium specimens of *Corema*, one found in 1880 by C. S. Smith, "on the summit of the Shawangunk Mountain" which was still rather vague; and the other, much more definite, by J. H. Redfield, June, 1883, with the location in Latin, as follows:

"In rupibus siliceis, super vallem Palmaghat, in montibus Shawangunk."

Palmaghat is the name of a steep sided valley which cuts into the front of the Shawangunk Mountains, west of Gardiner, Ulster County, and south of the Wildmere House, on the summit, at Minnewaska Lake. Its name is said to be Dutch for "Laurel Glen." A request for permission from the owners, the Daniel H. Smiley



Corema in bloom on top of cliff at east side of Palmaghat Valley

Hotel Company, brought a letter from its secretary, Mr. John K. Lathrop, informing us that Corema was known to him, on the trail south of the Wildmere, on the top of the cliffs on the east side of Palmaghat.

The party making this quest was composed of Mr. A. Tennyson Beals, Mr. Carl E. Bliss, Mr. Leon W. Bowen, Mr. W. Lincoln Highton, Mr. Louis W. Anderson, and the writer. We reached the entrance to the grounds of the Wildmere Sunday morning April 24, having chosen that date with the thought that Corema would then be in bloom, which proved to be correct.

The trail led south over the summit to the abrupt sides of

Palmaghat, and within a couple of miles we came upon large masses of *Corema*, in perfect condition for collecting, with the pollen on the staminate plants scattering in golden clouds at the slightest breeze. Following the trail farther south, we descended into a gully with a brook, and climbing again, along the ledges of the acute-angled point made by the southeast front of the mountain, a 400-foot cliff, and the eastern side of Palmaghat, where ice still remained in the crevices 50 feet below the brink, reached the promontory known by the picturesque name of "Gertrude's Nose." According to A. T. Clearwater's "History of Ulster County" the name is from the most prominent facial adornment of Gertruyd Bruin, wife of Jacobus Bruin, who settled in the Wallkill Valley nearby about 1665. Her neighbors seem to have thought it was merited. Here *Corema* was in great profusion and fine condition. It extended from the cliff edge north along the ledges, among the thin pitch pines and scrub oak, covering at least 200 acres of the mountain top. It grew only, as Redfield said, "in rupibus siliceis," on the white, almost purely siliceous quartzite, known as Shawangunk Grit, which forms the cap rock of the Shawangunk Mountains and also of their extension southwestward in the Kittatiny Mountains of New Jersey.

The plant was in much finer condition, sturdier and denser, than in the station in the West Plains, in the Jersey Pine Barrens. It appeared not to have suffered from ground fires, such as often destroy patches of *Corema* in the Barrens, probably because Gertrude's Nose is islanded from fires, by vertical cliffs on the west and south, and by a wet swale on the north, and the vegetation to the east or northeast, its only unprotected side, is too thin to encourage a fire, even if one started from that direction, which would be unusual. It seems, therefore, to have a permanent sanctuary in this location. Specimens were sent to the New York and Brooklyn Botanical Gardens and to the Gray Herbarium in Cambridge, Mass.

Another interesting plant growing about the stems of *Corema* was the boreal lichen, *Cetraria islandica* ("Iceland Moss.") which is rare and found only on high, open summits, in our latitude.

The Gertrude's Nose station for *Corema Conradii* is not hard to reach, with an automobile. The route is 9-W, from the New Jersey end of the George Washington Bridge, to Newburgh; Route 32 to Modena, and 55, west, via Gardiner, to the top of Shawan-

gunk Mountain, turning in, at the beginning of the drop on the west side toward Kerhonkson, to the entrance road leading to the Wildmere Hotel, on the west side of Minnewaska Lake. Ask for permission to use the Palmaghat-Gertrude's Nose Trail, well marked with lettered arrows, and follow it south and in about two miles begin to look for Corema on the cliff top and it becomes more plentiful out to the point of the Nose.

HOLLIS, LONG ISLAND

Wolfiella floridana in Northern New Jersey

JAMES L. EDWARDS

In the spring of 1925, while collecting aquatic plants in a pool on the north side of the Passaic River below Little Falls, I found *Wolfiella floridana* growing there rather abundantly. At the time it seemed reasonable to suppose that the plants had been introduced there and would not survive long. Numerous trips to the spot since then have shown that the plants have no difficulty in surviving the winters of this climate since they persist in about the same abundance from year to year in spite of the fact that the pool freezes over annually. Associated with *Wolfiella* at this locality are *Lemna cyclostasa* and *Lemna trisulca*. *Wolfiella* is found in tangled groups of fronds floating just under the surface of the water often mixed with the roots of *Lemna* and might easily be overlooked.

The occurrence of this plant and its persistence, if introduced, in this region so far north of its reported range seems worth recording.

MONTCLAIR, NEW JERSEY